



***Curriculum Vitae for Dr Josiah Mwivandi Kinama
(Agrometeorologist, Senior Lecturer and head of Agronomy)***

CURRICULUM VITAE

Dr. Kinama is an Agricultural scientist with extensive teaching and research experience with strengths and interests in agro-meteorology and modeling agricultural production, modeling climate change, climate change mitigation and adaptation research, crop water use, radiation use and soil water balance and cropping practices, organic and inorganic fertilizer use. His current research activities include: rice production under irrigated and rainfed agriculture, intercropping, gender roles and food security under climate change, fertilizer use under potato, maize, sorghum production as well as climate data use and food production in Rwanda.

Dr. Kinama has specialized in modeling crop production under different climatic scenarios to predict crop yields and management of yield gap analysis in handling food security under changing climate and variability. He has been involved in developing seed and planting materials as well as fertilizer and soil amendments to safeguard and enhance food security and safety in Kenya and beyond. Currently his research is on climate smart agriculture with a view to managing green house gas emissions and practices economising on water use and radiation use efficiencies.

1. PERSONAL DETAILS

- i) Name: Josiah Mwivandi Kinama
- ii) Date of birth: 20/12/1955
- iii) Religion: Christian
- iv) Citizen: Kenyan
- v) Marital status: Married with three children

2. **Qualification: (PhD., MSc., Pg. diploma., BSc. in agriculture)**

- i) University of Nairobi (1994 -1998), PhD (Meteorology)
- ii) University of East Anglia U.K (1989-1990), MSc.
- iii) University of Nairobi (1980-1981), (Post graduate diploma in soil and water conservation)
- iv) University of Nairobi (1976-1979), Bsc. (Degree in Agriculture)
- v) Machakos School (1970-1973), East African Certificate of Education (EACE)
- vi) Machakos School (1974-1975), East African Advanced certificate of Education (EAACE)
- vii) Kyevaluki Primary School (1964-1969), Certificate of Primary Education (C.P.E).

3. **WORK EXPERIENCE**

- i) **Currently Senior Lecturer (25.7.2008 to date)** – Department of Plant Science and Crop Protection, Faculty of Agriculture, College of Agriculture and Veterinary Sciences, University of Nairobi. I am head of agronomy unit teaching and supervising PhD, MSc and undergraduate. I am involved in research and mentoring students as well as increasing the visibility of the department to industry and other stakeholders.
- ii) **Lecturer (2001 – 2007)**
 - a) **Lectures:** ACA601 - Agro-meteorology and crop modeling in agricultural Production, modeling climate change, ACS 602 - Agro-ecosystems analysis, SCC610 - Climate change and Food security, Seed Science and Technology, Agronomy of perennial crops, ACS 201 - Principles of Crop Production, ACS – 204 Ecology and agro-meteorology. Agro-ecology, Biodiversity and Agro-forestry resources conservation and management, ADR 721 - Agro-meteorology and modeling
 - b) **2001 – todate.** I have been a supervisor and examiner of post graduate students and 3rd year and 4th year undergraduates at department of Plant Science and Crop Protection and other related departments at the University of Nairobi
- iii) **Senior Research Scientist at KARI**
 - a) **1999-2000. Soil and water management project.** Was a lead scientist in “**the hard to quantify**” facts on soil erosion and nutrients losses and their effects on crop yields at the field scale using the nutrient monitoring model (NUT MON) in eastern Kenya.
 - b) **1997-1998:** Was a Regional research program coordinator (RRPC) and senior research scientist based at the KARI National Dryland Farming Research Center Katumani. Dealing with the coordination of all regional research programs at the centre and other collaborating agencies. Promoted participatory approach that identified and diagnosed farmers’ agricultural production problems as well as mounting on–farm research programs to address the same. Was instrumental in farmer training and developed technology transfer to farmers for increased food production and security. Provided

leadership and scientific guidance to the multidisciplinary research team in the program as well as writing technical reports for the program to KARI and Funding Agencies

- c) **1995-1996:** Wageningen Agricultural University in the Netherlands. **As a visiting scientist**, gained international exposure in working in agro-forestry systems , research and teaching, presented a scientific Paper and finalized PhD thesis writing
- d) 1993-1995: (University of Nairobi/Wageningen Agricultural University). As **Research fellow at the International Centre for Research on Agro-forestry (ICRAF) now World Agroforestry Centre**, I undertook PhD program by research and thesis. **Did Research** on - station hedgerow intercropping research and on-farm alley cropping handling, soil and water conservation on sloping land, competition for water, light and other growth resources in agro-forestry systems. Gained on the job international exposure in Agro-forestry Research with International Agricultural Research Centres (CGIARs)
- e) **1989-1992: Kenya Agricultural Research Institute (KARI)**. On - farm soil and water management Research project. Did diagnostic farm surveys on farmers fields and designed appropriate research programs to address the farmers' problems
- f) **1985-1988: Ministry of Agriculture: Scientific Research Division**. Headed soil and water Management Research for sustainable food production at The National Dry Land Farming Research Centre (Katumani) - KARI
- g) **1979-1981 – Ministry of Agriculture - agricultural officer and deputy officer in-charge of farm mapping unit** dealing with land use planning and demarcations of large farms in the settlement schemes to boost food production, in key grain producing areas of rift valley in Kenya
- h) **1982-1983 – Ministry of Agriculture**, deputy officer in charge of soil and water management station in Kipkelion in Kericho district – dealing with opening up of more land in Muhoroni sugar belt and sonny. Handling overall capacity building in land preparation, planting and water storage to enhance sugar production
- i) **1983-1984: Ministry of Agriculture**. Officer Incharge of soil and water management station in Kajiado district. Dealing with opening up of more land in Loitokitok and Ngong divisions for increased food security through mechanization irrigation development. Undertook farmer capacity building in land preparation, planting, weeding, harvesting, processing and marketing of main grain crops in Kenya.

4. DOCTOR OF PHILOSOPHY (PHD) STUDENTS SUPERVISED

Completed and Graduated

- i) Victoria. Amwoliza Gioto I85/96312/2014. Increasing food production Resilience using eco-based farming practices under changing climate in Tharaka Nithi, county, Kenya 2018. University of Nairobi (supervisors -Wandiga,Oludhe, Kinama) – graduated -2018

- ii) Kavila Kyuma A74/90121/2013. The effects of climate variability on *Prosopis juliflora* spread, other vegetation trends and livestock dynamics in the drylands of Magadi in Kajiado county, 2014. University of Nairobi (supervisors -Wahome, Kinama, Wasonga) – graduated 2016
- iii) Gerald Kyalo, 2016. Exploring improved nutrient options for increased rainfed lowland rice production in eastern and northern Uganda, University of Nairobi (supervisors - Cheminingwa and Kinama),2016 - graduated, 2016.
- iv) Sarah Muthenya N85/14558/2009. Effects of community livelihood practices on the conservation of *Melia volkensii* Gürke in Kibwezi, Kenya 2013, Kenyatta University (supervisors (Mbugua, Waswa and Kinama), 2016 – graduated in 2017

PhD - Internally examined and graduated

- i) Emily Nyaboke Bosire I80/50271/2015. Modeling impacts of climate change on sorghum production in the semi-arid environment of Machakos county.. University of Nairobi
- ii) Egeru Antony A74/82581/2011 2014. PhD – Dryland Resource management University of Nairobi A assessment of forage dynamics and its determinants under variable climate in karamoja sub-region of Uganda.
- iii) Mr. Biriam Ndiso A80/80123/2010 PhD thesis –Enhancing performance of maize-cowpea based cropping systems in coastal lowland of Kenya through stress resilient varieties and soil moisture conservation practices
- iv) Mr. Mwangi Peter Wanjohi’s PhD degree thesis (‘Performance and influence of multipurpose legumes and their residues on maize in the cold semi-arid areas (The case of Laikipia district, Kenya) -2010
- v) Maobe Samson Nyangau A80/7281/2000. Maize response to Mucuna Green Manure. PhD thesis - University of Nairobi.
- vi) Mutonyi Jonathan Management strategies for low PH and potassium deficiency in the Mumias sugar zone of western Kenya. PhD 2014

PhD Students at Writing thesis stage

- i) Abdimajid nunow Abdi, I84/50666/2016. Investigating how gender and community based adaptation capacities impact food security in Kajiado and Kiambu counties, Kenya (supervisors -Muthama, Inida and Kinama)
- ii) Seth Onyango A80/51134/2016. An economic analysis of impacts of zoonotic disease vector control on household income, a case of tsetse and trypanosomiasis suppression in Faza island of Kenya – (supervisors - Wangia, Kinama and olet, 2016)
- iii) Baraka otieno J84/499921/2015.Evaluating Resilience of Socioeconomic and ecological Systems to Effects of climate Change in pastoral and agropastoral livelihoods of arid and semi-arid counties of Kenya: Case study of Narok and Laikipia counties - (supervisors - Wahome, Kinama and Wasonga)

- iv) Moyo Richard A80/80030/09. The effects of tillage and climate variability on the yield of cowpeas in semi-arid Zimbabwe, 2010. (supervisors - Kinama, Onwonga, Keter)
- v) Rukoroto Busolo (2009). Influence of mulching and alley cropping induced microclimate on the water requirements satisfaction index of maize (*Zea mays* L.) in Makueni district of Kenya - (supervisors - Karanja, Muthama & Kinama)

PhD Students at Research stage

- vi) Enhancing Landscape and farmer resilience against climate variability in Makueni county, Kenya, Benard Musyoka Mwololo A74/99447/2015 (supervisors - Kinama, Kathumo, Wickldr) – data collection stage
- vii) Steven Tirop A82/96169/2014. Impact of climate variability and change on water resources and governance in the lake Naivasha basin, Kenya. (supervisors - Mungai, Mbuvi and Kinama)

External PhD student examination list

- i) Samuel Kimani Kiumbuku.N85/26169/13. PhD. Gendered perspective on the impacts of climate variability on rural livelihoods in Makueni county, School of Environmental Studies. Kenya. Kenyatta University- 2018
- ii) Serah Wairimu Kimaru PhD. Effects of water harvesting techniques on agricultural production in the low midland zone of Tharaka Nithi county, Kenya -2016. (Kenyatta University)
- iii) Ms Wambui Nganga. PhD – Soil carbon sequestration potential in different land use types on small holder farms of Muranga county, Kenya- 2016. (Kenyatta University)
- iv) Omoyo PhD.(2012) Predicting Food security with agroclimatic data under climate variability and change in lower Eastern Kenyas ASALS, Masinde Muliro University of Science and Technology (MUUST)
- v) David Gikungu Irungu.(PhD). Dynamic risk model for Rift Valley Fever Outbreaks based on climatic data in Kenya, Masinde Muliro University of Science and Technology (MUUST) 2015
- vi) Mary Stella Wabwoba (PhD). Household vulnerability to food Insecurity in Bungoma county, Masinde Muliro University of Science and Technology (MUUST) 2015

MASTER OF SCIENCE STUDENTS SUPERVISED

Completed and graduated MSC. Students

- i) J. Yarkwapolo (2018). Effect of tillage practices on water use efficiency and performance of common beans in Machakos county, Kenya. (supervisors -Ayuke, Kinama and Sijali) graduated in 2018
- ii) Mr. MPunga JEAN A56/83093/2015 – Evaluation of Promiscuous soybean varieties for agronomic and seed quality traits in maize/soybean intercropping systems in Kenya - (supervisors – Kinama, Olubayo, Wanderi, Muthomi and Nzube), Graduated in 2018
- ii) Kimei, P. Kiplimo, I54/64625/2013. Effects of participatory research on adaptation to climate change by small scale farmers: A case study of Lower Nyando Sub county, Kenya- (supervisors -Kinama and Opere) – waiting to graduate (2019)
- iii) Barak Mudeny A55/76188/2014. Effects of variety and methods of cassava propagation in Kenya, MSc. 2015 (supervisors - Kinama, Ulubayo and Kivuva) - graduated 2016
- iv) Raphael Khaemba A56/61323/2013. MSc. Agronomy. Effect of soil moisture conservation Practices on growth and yield of Three Cowpea varieties under basin irrigation in Turkana County.2014. (supervisors - Kinama, Cheminingwa) – graduated 2016
- v) Collins, Juma A56/79557/2012. The use of short anthesis – silking interval in developing drought tolerant early maturing maize varieties in Kiboko, Kenya (supervisors -Kinama & Kahiu) - graduated-2013
- vi) A. Nabwisa. Assessment of genetic diversity in wild and cultivated jatropha curcus L. Accessions in Kenya. (supervisors -Kahiu & Kinama) – graduated 2013
- vii) A. Muniyithya A56/75466/2014. Effect of plant spacing and intermittent flooding on growth and yield of selected lowland rice characteristics (supervisors - Chemingwa, Kinama and Murori) – graduated 2016
- viii) P .Mutiso A56/67615/2013. Effect of selected water harvesting techniques and micro-dosing on the yield of pearl millet in Makueni county – (supervisors - Kinama & Onyango) – graduated 2018
- ix) Almas, Irika MSc Agronomy. 2013. The effects of organic and inorganic fertilizers on the growth, yield and oil content of sunflower in acidic soils of Morogoro, Tanzania -. (supervisors -Kinama & Cheminngwa) – graduated 2015
- x) Osama K. Sarah A56/77969/2009. MSc. Plant breeding and biotechnology. Marker assisted introgression of Striga Resistance from N13 to farmer preferred Sorghum variety 2012(supervisors – Kinama & Kahiu) – graduated 2014
- xi) Marion, N.K. Gathumbi A56/ (2004/2005). MSc. Horticulture. The effects of fertilizer and mulberry variety on cocoon and silk quality. (Supervisors - Kinama and Obutho) - Graduated 2008
- xii) Regina Muthoni Nderitu, A56/7933/2006 –MSc agronomy 2006/2007. Groundnut production in different agro-ecological zones in western Kenya – fertilizer use and variety testing. – graduated 2008

Selected theses examined MSc. students as non-supervisor

- i) Glosriose Nsengiyumva I58/68861/2013. MSc. climate change and adaptation. A participatory support tool for small holder farmers climate change adaptation in Bugesera District, Rwanda. graduated in 2016
- ii) Kabutbei's JepNgetich, Msc. Agronomy A56/65414/2010. Adaptation of Andean Dry Bean Genotypes to drought stress. graduated 2014
- iii) N. Njiru A56/20720/08. MSc Soil Science. Assessing the impact of Climate variability and climate change on maize performance in Semi-arid eastern Kenya using APSIM- graduated 2010
- iv) Kitonyo Onesmus Musembi. MSc. Agronomy. Performance of Farmer-preferred Maize varieties intercropped with beans in the semi- arid regions of Kenya' - graduated – 2009
- v) Anna Itwari A56/7876/2005. MSc in Agronomy. Influence of supplementary irrigation, organic manure application and soil type on micronutrient density in common bean (*Phaseolus Vulgaris L.*) – graduated -2008
- vi) Okat Samuel Juma, A56/71100/2007 MSc. Agricultural Resource Management Impact of climate change and variability in Enkaroni Location, Kajiado district. graduated 2009
- vii) Wahome, Kinguru Msc. J56/8/7801/2003. The importance and production of food grain legumes in the small holder farmers in Machakos, District. - graduated – 2005

Masters students at writing thesis stage

- i) Kagwiria, D. A56/84429/2016. Effect of organic and inorganic fertilizer regimes on sorghum growth, yield and feed quality.(supervisors – Kinama, Cheminingwa and Oscar)
- ii) Kimeli, P. Kiplimo I54/64625/2013. Effects of participatory research on adaptation to climate change by small scale farmers: A case study of Lower Nyando Sub county, Kenya- (supervisors - Kinama and Opere)
- iii) Charity Muchira, A56/86826/2016. The effect of direct seeding and transplanting on growth and yield of different rice varieties on rainfed and irrigated lowlands of Kenya. Submitted thesis for examination (supervisors – Kinama, Kimani)
- iv) Mbarushimana Jean Pierre, A56/88227/2016. Effect of inorganic fertilizers and planting density on growth and yield of selected maize varieties in Eastern Rwanda submitted for examination ,2018 (supervisors - Kinama, Cheminingwa)
- v) Rahab Mangot, A56/78594/2015. Effects of Soil types and moisture stress on growth and yield of upland rice at Mwea Kirinyanga district, 2015. (supervisors - Cheminigwa, Kinama)
- vi) Gladys Makaa A/56/74928/2014 Gladys Makaa MSc. Agronomy A/56/74928/2014. Effect of nitrogen fertilizer rate and split application on the growth and yield of three lowland rice varieties in Mwea irrigation scheme, (supervisors - Cheminingwa, Kinama, Murori)

- vii) R. Ngina MSc. Agronomy A56/68515/2013. Intercropping pearl millet (*Pennisetum glaucum* L) with grain legumes for improved productivity and income in semi-arid Kenya –2014, , (supervisors - Onyango & Kinama)
- viii) Mr. Leshani (2014). Evaluating the performance of sorghum lines in Makueni County. (supervisors- Kinama & Onyango).
- ix) Mbogo,W, MSc agronomy (A56/80517/2012. The effects of inorganic fertilizer and cattle manure on growth and yield of two Kenyan potato varieties in Kiambu County. (supervisors -Kinama, Onyango and Kabira)

Masters students at Research stage

- i) G. Gurtrude A56/89289/2016. Influence of soil PH on striga effect on growth and yield of WH505 maize under varying rates of organic and inorganic fertilizers. (**supervisors - kinama and Woyengo**)
- ii) Robert Okum James A56/7827/2017. Effects of improved tillage practices on moisture conservation, growth, nodulation and yield of selected green gram varieties in arid and semi-arid areas, - (supervisors - Kinama and Cheminngwa)
- iii) Irandagiye Laetitia I54/5775/2017. Effect of uptake of climate information service on food crops productivity in Rwanda – (supervisors – Kinama and Karanja) graduated 2018
- iv) Daudi Dindi Aleri, A56/72232/2014. Effect of plant density on the yield performance of hybrid maize varieties under irrigated and water stressed conditions in Kenya. (supervisors – Kinama, Cheminingwa)
- v) Moi Peter A56/7825/2017. Effect of intercropping sorghum with cowpea and its effect on growth and yield of sorghum (supervisors – Cheminingwa and Kinama)

External MSc student examination list

- i) Nancy Nyambura Mburu, Sustainable land management in snowpeas farming for local ecosystems in Gathara ward Nyandarua county 2016 Msc – Kenyatta University, 2018
- ii) Peter Mwangi Njoroge N50/24419/13. M.ENV. Impact of land tenure change on land conservation in Kajiado county, Kenya. Kenyatta University, 2018
- iii) Muganga Mubembe A148F/29060/2014. Effect of selected integrated soil fertility management on soil chemical properties and cassava yield in South Kivu. DR Congo, Department of Agricultural Resource management, Kenyatta University. 2018
- iv) Michel Kabirigi 2015. Effects of conservation agriculture on bean and maize yield, soil properties and water productivity in Bugesera District, Rwanda – Kenyatta University
- v) Musyoki Maluki, 2015. Factors affecting adoption of agro-forestry practices by smallholder farmers in semi arid lands of Kenya – South Eastern Kenya University
- vi) Gitari Harun Ireri, Msc: Lime and manure application to acid soils and their effects on biochemical soil properties and maize performance at Kavutiri – Embu county, 2013 – graduated in 2013. Kenya University

- vii) Mnambole Arlindo (2003). Efficiency of integrated incorporation of cattle manure and mineral fertilizers on maize yields in acidic soils of Beira corridor, Mozambique Msc - graduated 2013, Kenyatta University
- viii) Maina Thuo, MSc. (2002). The potential of On-farm Approach in conservation of Indigenous Tree species among small holder farmers of Muranga District, Kenya. Kenyatta University -graduated in 2003
- ix) Dekow S. Mohamed. (2002/2003) MSc. The Environmental Implications of Grazing Block Development, Garissa District. Kenyatta University- graduated in 2003.
- x) Thomas, B. Yatich 2003/2004. Institutional and Physical frameworks for water management in Arid and Semi-arid areas of Marigat Division, Kenya. Kenyatta University- graduated in 2004.
- xi) Catherine Mbaisi (2005/2006) Msc. in Environmental Planning and Management. Land use changes and their impacts on agriculture, Kapsabet, Nandi North District. Kenyatta University- graduated in 2006
- xii) Esther M. Mwele (2005/2006) – MSc. in Environmental Planning and Management. The challenges and opportunities for sustainable cattle ranches in Kitui district. Kenyatta University - Graduated in 2006.

SELECTED UNDERGRADUATE STUDENTS SUPERVISED BSC. Agriculture (crop science option) MAJOR SPECIAL PROJECTS

- i) Sonia Ayeta Otini A85/4642/2014. Evaluation of vermin-compositing Tithonia on growth and development of Spinach
- ii) Ann Gachanja A22/2296/2014. Effects of various levels of poultry manure and plant spacing on the growth and yield of night shade (*Solanum Nigrum*)
- iii) Nzisa Kivaa A22/2012/2013. Effects of different rates of organic and inorganic fertilizers on growth and yield of beans
- iv) David Macharia Wamuyu A22/1771/2010. Evaluation of maize germplasm for i) insect maize resistance for Africa (IRMA) ii) water efficient maize for Africa (WEMA) improved maize for African soils (IMAS) iv) drought tolerant maize for Africa (DTMA) at Kiboko, Kenya by CTMMYT sponsored project
- v) Wambui Gitau A22/2331/2014. Effects of different levels of organic and inorganic fertilizers on carrot yield and quality
- vi) Charles Juma Wangui A22/2307/2014. Efficacy comparison of GNLD super Gro and AQUAWET when used with a market leading fungicide chlorotharonyl 50% W/V to control powdery mildew in snow peas
- vii) Hiram Mwangi – A22/2027/2013. Analysis of factors affecting coffee production in Kenya. Case study in university of Nairobi – upper Kabete farm.

5. ACADEMIC PUBLICATIONS

Refereed journal articles

- i. Stellamaris N. Mulika, George N. Chemining'wa and Josiah M. Kinama (2019). Influence of Green Gram (*Vigna radiata* L.) Varieties on Growth and Yield Attributes in Dry Ecological Zones of Kenya. *International Journal of Plant & Soil Science* 29(6): 1-6, 2019;
- ii. Seth Onyango, Sabina Wangia, Josiah Kinama and Pamela Olet (2019). Factors Affecting Choice of Tsetse and Trypanosomiasis Control methods in Lamu county, Kenya. *International journal of Agricultural and Environmental Sciences*. Vol. 4(2)pp 21-29
- iii. Abdimajid Nunow, J. Muthama, M. Inida, Josiah. Kinama(2019).Comparative analysis of the role of gender in climate change adaptation within Kajiado and Kiambu counties, Kenya. *Journal of climate change and sustainability*. Vol. 2(1)pp28-37
- iv. Abdimajid Nunow, J. Muthama, M. Inida, Josiah. Kinama(2019).The effect of climate change on household food security in Kajiado and Kiambu counties, Kenya. *International Journal of Innovative Research and Knowledge*. Vol. 4(4) 1-13
- v. Rahab Magot, George. Cheminingwa, Josiah Kinama, John Kimani, majumi kikuta, Patrick Gicheru Makihara, Hiroaki Samejima and Dai (2019). Growth of rice varieties in different Kenyan soils under water deficit conditions. *Journal of agricultural science* , Vol.II. NO 6:2019-9752 ISSN 1916, E ISSN 1916-9760
- vi. Jean de dieu Mbarushimana, Josiah Mwivandi Kinama and George Ndiema Cheminingw'a, 2018. Effects of inorganic fertilizers and planting densities on growth and yield in selected maize varieties in eastern Rwanda. *Int.J.Agron. Agri.R. (IJAAR)*.ISSN:2223-7054(print) 2225-3610(online). [Http://innspub.net](http://innspub.net). Vol.13.No. 5, P.22-34,2018.
- vii. R.K.Kyuma, J.M.Kinama, R.G,Wahome,V.O. Wasonga and Habineza M. Jean Pierre. 2018. Estimating above ground biomass and carbon stocks of *prosopis juliflora* using allometric equations in drylands of Magadi, Kenya. *Int.J.Agron.Agri.R.(IJAAR)*.ISSN:2223-7054 (print) 2225-3610(online), <http://www.innspub.net> Vol.13,NO.4,p.92-103,2018
- viii. Josiah, M Kinama, Irika, M., Habineza. M. Influence of organic and inorganic fertilizers on sunflower oil content in Morogoro Tanzania. *Int. J.Agron.Agri.R. (IJAAR)*. ISSN:2223-7054 (print) 2225-3610(online), <http://www.innspub.net> Vol.12,No 6, P.166-174, 2018
- ix. P.M. Mutiso, J.M. Kinama , C. Onyango. Effect of insitu moisture conservation technique on yield and water use efficiency of pearl millet in Makueni, Kenya. *Int. J.Agron. Agri.R. ISSN:2223-7054(print) 2223-3610(online)*, <http://www.innspub.net> vol.12, NO.6, p.186-196,2018
- x. Josiah M. Kinama and Habineza, M.Pierre (2018). A review on adavantages of cereals-legumes intercropping systems: Case of Promiscuous soybean varieties and maize.

- Int.J.Agron.Agri.J. ISSN:2223-7054(print) 2225-3610(online) <http://www.innspub.net>, Vol. 12,NO.6,P.155-165,2018
- xi. Irika,M, Josiah.M. Kinama, Habineza,M.D.Pierre (2018). Assessment of inorganic and organic fertilizers regimes on yield and yield components of sunflower in Morogoro, Tanzania.Int.J.Agron.Agri.R.ISSN:2223-7054(print)2225-3610(online). <http://www.innspub.net>, Vol.12, NO.6,p.83-93
- xii. Habineza M.Jean Pierre, Josiah M. Kinama, Florence M. Olubayo, Susan W. Wanderi, Felister M. Nzube (2018). Effect of intercropping maize-soybean on grain quality traits in Kenya. Journal of Agricultural Science ISSN 1916-9760. (online) E-mail, HYPERLINK "mailto:jas@ccsenet.org"jas@ccsenet.org, vol 10, NO2 (2018)
- xiii. Habineza M.Jean Pierre, Josiah M. Kinama, Florence M. Olubayo, Susan W. Wanderi, Felister M. Nzube (2018). Effect of intercropping maize and prosmiscous soybean on growth and yield. Journal of Experimental Agriculture International 18(6): 1-21, 2017.
- xiv. Habineza M.Jean Pierre, Josiah M.kinama, Florence, M.Olubayo, Susan W.Wanderi, James M. Muthomi, Felister M. Nzube, 2018. Effect of intercropping maize and soybean on soil fertility, International Journal of Agronomy and Agricultural Research (IJAAR). VOL.12.No.2, p.87-100 (2018)
- xv. Yarkpawalo K. Johnson, Fredrich,O. Ayuke Josiah Kinama, Isaya Sijali. Determining the WUE of drought tolerant of common bean varieties. Int.J.Agron.Agri.R: ISSN:2223-7054(print) 2225-3610(online). <http://www.innspub.net>, Vol.12,12, NO.3. p.35-45, 2018.
- xvi. Yarkpawalo K. Johnson, Josiah Kinama, Fredrich, O. Ayuke, Isaya Sijali. Assessing factors influencing adoption of drought tolerant common bean varieties. Case study of Machakos county. Int.J. Agron. Agri.R. ISSN:2223-7054(print) 2225-3610 (online). <http://www.innspub.net> Vol.12,NO.2, P.68-77,2018
- xvii. Yarkpawalo K. Johnson, Fredrich,O. Ayuke Josiah Kinama, Isaya Sijali Effect of tillage practices on water use efficiency of different drought tolerant common bean varieties in Machakos county, eastern Kenya. American Scientific Research Journal for Engineering, Technology and Science (ASRJETS). ISSN(print) 2313-4410, ISSN(online) 2313-4402, <http://asrjetsjournal.org>
- xviii. Sarah. M. Muthenya, P.K. Mbugua, Fuchika Waswa and Josiah M. Kinama. International Journal of innovative Research and knowledge. The effect of community livelihoods

practices and nutritional value of the conservation of melia volkensii in Makueni county. ISSN:2213-1356, Vol3. Issue NO6 (2018)

- xix.** Gladwell Mwemba Mwasi, Joseph O.Junga, Paul N Mbugua, Josiah Mwivandi Kinama, George O.Okello IOSR Journal of Agriculture and Veterinary Science (IOSR-JAVS) e-ISSN:2319-2380, P-ISSN:2319-2372, Volume 10, Issue12 ver.1 (December 2017) pp26-42. HYPERLINK "http://www.iosrjournals.org" www.iosrjournals.org The contribution of Urban and Peri Urban Livestock Farming in Nairobi, county Kenya.
- xx. Mbogo, N.W., Kinama, J.M., Onyango, C., Kabira, J.N (2017). Effect of inorganic fertilizer and cattle manure on growth and yield of two Kenyan potato varieties. International Journal of Agronomy and Agricultural Research (IJAAR). ISSN:2223-7054 (print) 2225-3610 online. [Http://www.innspub.net](http://www.innspub.net) Vol.10, No.1, p.68-72,2017
- xxi. A.K. Muniyithya, R. Murori, G.N.Cheminingwa and J. Kinama Transplanting, plant spacing and water management practices by paddy rice farmers in Mwea irrigation scheme. International Journal of Agronomy and Agricultural Research (IJAAR).Vol.11, No.2, p. 68-76,2017
- xxii. A.K. Muniyithya, R. Murori, G.N.Cheminingwa and J. Kinama. Effect of plant spacing and intermittent flooding on growth and yield of selected lowland rice varieties in Kenya. International Journal of Agronomy and Agricultural Research(IJAAR).Vol.11, No.1,p.123-130,2017
- xxiii. B.B. Mdenye, J.M. Kinama, F. Olubayo, B. Musembi, and J. Muthomi. Int.J.Agron.Res. 12(1), 1-10, January, 2018. The effects of storage methods of cassava planting materials on establishment and early growth vigour.
- xxiv. R.N. Khaemba, J.M. Kinama and G.N. Cheminingwa. Effect of tillage practices on soil moisture retention under three selected cowpea varieties. International Journal of Plant and Soil Science. 16(5):1-5, 2017. Article No. IJPSS.32781, ISSN: 20320-7035
- xxv. Baraka, B. Mudenye, Josiah, M. Kinama, Florence, M. Olubayo, Benjamin, M. Kivuva and James, W. Muthomi. Effects of storage methods on carbohydrate and moisture of cassava planting materials. Journal of Agricultural Science. Vol.8 NO.12; 2016, ISSN 1916-9752E- ISSN 1916-9760. Published by Canadian Centre of Science and Education.
- xxvi. R.N. Khaemba, J.M. Kinama and G.N. Cheminingwa. Effects of tillage practice on growth and yield of three selected cowpea varieties. Journal of Experimental Agriculture International. 14(3):1-11, 2016. Article no. JEAI. 26894, ISSN :2231-0606
- xxvii. Kyuma, R.K., Wahome, R.G., Kinama, J.M. and V.M. Wasonga. Temporal relationships between climate variability, Prosopis juliflora invasion and livestock numbers in the drylands of Magadi, Kenya. African Journal of Environmental Science and Technology. Vol.10(4), pp.129-140. April. 2016
- xxviii. C.J Stigter, Sheng Dawei, Liu Jing, Li Chunqian, Isabel M, Zomonique-Hurtado, Ahmed E.Mohamed, Ahmed T Abdala, Nageeb, Bakheit, Nawal K.N Al-Amin, We Yunag Josiah Kinama. Meeting farmers needs for meteorological services: A review

with case studies part IV. Historical cases. Italian Journal of Agrometeorology 04/2015: 2015 (1) 59-66.

- xxix. Kahiungu, Alex Nabwisa and Josiah Kinama (2012). Biofuels (2012) 3(5), 535-543
Adaptation of *Jatropha Curcusa* L. in the agroecological environments of Kenya: GenotypeX environment interactions analysis
- xxx. Kinama, J.M., Ong,C.K., Stigter C.J., Gichuki, F. (2011). Journal of Agricultural Sciences and Technology. Hedgerow intercropping on maize or cowpea/ senna for drymatter production in semi-arid eastern Kenya. Vol 1 no 3 – B1 (2011)372-384
- xxxi. Kinama, J.M., Nganga, J.K., Ong, C.K., Stigter, C.J., Gichuki, F. 2007. Contour hedgerows and grass strips in erosion and runoff control on sloping land in semi arid Kenya (Arid Land Research and Management, Journal of Native Agricultural Soil Environments Volume 21:1-19, 2007).
- xxxii. Kinama, J.M., Stigter, C.S, Ong, C.K, Ng'ang'a, J.K. and Gichuki, F.N. (2005). Evaporation from soils below sparse crops in contour hedgerow agroforestry in semi-arid Kenya. Agricultural and Forest Meteorology Journal 130 (2005) 149-162
- xxxiii. Stigter, C.J., Kinama, J.M., Zhang, Y., Oluwasemire, K.O., Zheng,D., Nawal, K.N.and Ahmed, A. (2005). Agro-meteorological services and information for decision making: Some examples from China and Africa. Japanese Agricultural Meteorology 60 (2005): 327-330
- xxxiv. Nutrient balances at farm level in Machakos (Kenya), using a participatory nutrient monitoring (NUTMON) approach. Gachimbi, L.N., Van Keulen, H., Kinama, J.M., Nguluu, S., Itabari, J.K., Ikombo, B.M., Thurania, E.G., Karuku, A.M., de Jager, J. and Nandwa, S.M. (2005). Journal of Land Use Policy 22:13-22. The Netherlands
- xxxv. C.J. Stigter, S.B.B. Oteng'i, K.O. Oluwasemire, N.K.N. Al-amin, J.M. Kinama & L.O.Z. Onyewotu, 2005. Recent answers to farmland degradation illustrated by case studies from African farming systems. Annals of the Arid Zone,944 (2005) 3).
- xxxvi. Kinama, J.M. (2004). Indigenous Technical Knowledge and Rural development in Eastern Kenya. South African Rural Development Quarterly. I Vol2, 04,) Oct- December 2004. SSN 1812-299X. A Quarterly publication of the rural forum.
- xxxvii. Ong, C.K., Kinama, J.M (1996). Agroforestry for soil and water conservation in drylands. E. Afr. For. J. 62 (1). 151-162. Nairobi, Kenya, 1996.
- xxxviii. Papers presented in scientific conferences, seminars and workshops**
- xxxix. Kagwiria .Dorcas, Oscar K. Koech, Josiah M. Kinama, George N. Chemining'wa, and Henry Fred Ojulong (2018). Presented Poster paper on Constraints of sorghum production among small scale farmers in Makueni County, Kenya at the African sixth Science Week and Rurorum Biennial Conference at Kenyatta International Covention Centre (22nd-26th October, 2018).
- xl. Seth Onyango, Sabina Wangia, Josiah Kinama and Pamela Olet (2018). Impact of tsetse and trypanosomiasis control on poverty. Paper presented at The Animal production Society of Kenya 2018, Scientific symposium 4th-6th April, 2018, Nanyuki, Kenya.
- xli. Seth Onyango, Sabina Wangia, Josiah Kinama and Pamela Olet (2017). Impact of TseTse and Trypanosomias control on household income in Pate Island of Lamu county

Kenya. Paper presented at the 34th General Conference of the International Scientific Council for Trypanosomiasis Research and Control (ISCTRC) and the 16th PATTEC coordinators meeting, LUSAKA, Zambia (11th-16th September, 2017)

- xlii. **Kyuma, Wahome, Kinama and Wesonga**) Paper on the effects of climate variability on prosopis juliflora spread, other vegetation trends and livestock dynamics in the drylands of Magadi in Kajiado county presented during the 4th Ruforum Biennial conference held at VIP hotel Maputo Mozambique **19th-25th July 2014.**
- xliv. **Mwahija, Kinama and Chemingwa, Nyambilia** Paper on effect of organic and inorganic sources of Nitrogen on growth, yield and oil content of sunflower in highly weathered soils in Morogoro, Tanzania . presented during the 4th Ruforum Biennial conference held at VIP hotel Maputo Mozambique **19th-25th July 2014.)**
- xlv. Nabiswa, W.A., Ngugi, E.K. and Kinama, J.M. Githinji. (2011). Genotype Environmental interactions of Jatropha Curcas. Growth and yield components. Agro 2011 Biannual Conference 26th-28th sept, 2011.
- xlvi. Nabwisa, W.A., Ngugi, E.K. and Kinama, J.M. Githinji. Genetic divergence in Jatropha Curcas. A biofuel feed stock in Kenya (2011). Agro 2011 Biannual Conference 26-28 sept 2011.
- xlvii. Kinama, J.M., Munyao, A.O, J. N., Kimenju, J.W., Ndtu. J.M, and Mutiga (2011). Rain water harvesting for improved livestock production under climatic variability and change in Kajiado, Kenya. Paper presented at E agro conference, Faculty of Agriculture December 2011.
- xlviii. Okat, S.K., Wangia, S.Mbugua, P., Kinama, J.M., Ojoo, R., Ndtu J.M. and Mongare, P. Paper presented at the Veterinary Biennial Conference held at the College of Agriculture and Veterinary Sciences in July 2010 Impacts of Climate change and variability on the livestock based livelihoods in Enkaroni location of Kajiado district.
- xlix. Moyo, R., Kinama, J.M., Onwonga, J. and Keter, M. (2010). Climate variability and tillage practices: Effects on soil moisture, carbon dynamics and crop productivity in semi-arid southern Zimbabwe. Paper presented at the Ruforum Scientific Conference in Kampala, Uganda between 20th to 24th September, 2010.
- l. International Workshop on Addressing the Livelihood Crisis of Farmers: Weather and Climate Services (Brazil). Meeting farmers' needs for agrometeorological services: an overview and case studies. Kees Stigter, Sue Walker, H.P. Das, Samsul Huda, Zheng Dawei, Liu Jing, Li Chunqiang, Ismabel H.D. Hurtado, Ahmed E. Mohammed, Ahmed T. Abdalla, Nageeb I. Bakheit, Nawal K.N. Al-Amin, Wei Yurong, Josiah M. Kinama, Durton Nanja, Pieter D. Haasbroek (2010).
- ii. Githunguri, C.M., Kinama, J.M., Karuri, E.G., Gatheru, M. and Ragwa, S.M. 2009 Status in the Trade of Cassava and Cassava – Based Products in the Coastal, Eastern and Western Regions of Kenya, KARI, Biannual Conference, Nairobi
- iii. **Kinama, J.M., Stigter, C.J., Ong, C., Ng'ang'a, J.K. and Gichuki, F.N. (2007). **Alley cropping (contour hedgerow intercropping) maize or cowpea/senna for increased drymatter production in the semi-arid areas of Eastern Kenya.** Proceedings of African Crop Science Society (ACSS) in Melkia – Egypt, November, 2007.**
- iiii. **Kinama, J.M., Stigter, C.J., Ong, C.K., Ng'ang'a J.K. and Gichuki, F.N. Comparison of soil moisture measurement by TDR and neutrone probe tube at 30cm depth and crop yields in a maize and cowpea agroforestry and grass strip farming system in semi-arid areas of eastern**

- Kenya. Paper presented at the 24th Conference of the Soil Science Society of East Africa, Issak Walto Hotel, Embu , 26th-30th November 2007(pg. 271-301) proc
- l.iii. **Kinama, J. M.** and Stocking, M. The application of SLEMSA MODEL as land use management tool in the semi-arid areas of Kenya. Paper presented at the 24th Conference of the Soil Science Society of East Africa, Issak Walto Hotel, Embu , 26th-30th November 2007(302-320) proc.
 - liv. Kinama, J.M, M. Stocking and M. Maingi. Erosion hazard mapping in the semi-arid areas of eastern Kenya, Isaac Warthog hotel SSSEA proc.(208-221).
 - lv. **Kinama, J.M.** (2005). Resources distribution for pastoral conflict management in the Northern Districts of Kenya. **Paper presented at the 4th Kenya Pastoralist Week** held in Nairobi, December, 2005. **Cemiride, Kenya Pastoralist Week (KPW) Workshop proceedings.**
 - lvi. **Kinama, J.M.**, Stigter, C.J., Ong, C., Ng'ang'a, J.K. and Gichuki, F.N. (1999) Erosion and runoff control in a maize /senna agro forestry system in a semi-arid area of Eastern Kenya. **Proc. of Soil Science Society of East Africa (SSSEA) held in Kampala, Uganda, Sept.1999. (I SBN No 9966-879-27-7) pp. 220-226**
 - lvii. **Kinama, J.M.**, Stigter, C.J., Ong, C., Ng'ang'a, J.K. and Gichuki, F.N (1994).The effects of microclimate, soil and water conservation and competition of hedgerows on sloping lands for sustainable land use in Machakos District, Kenya. In C.J.Stigter, F.N. Wangati, J.K. Nga'ng'a and D.N. Mungai (eds). **The TTMI project and the picnic model. Proc. of international TTMI workshop April 1994 Nairobi, Kenya. (ISBN No 90-6754-403-5) pp136-146**
 - lviii. Kinama,J.M (1986). An integrated approach to soil and water management in the arid and semi-Arid zones of Kenya paper: **Proceedings of the OAU drought symposium on food grain production in the semi-arid regions** of Africa held at Kenyatta International Conference centre Nairobi.19th-23rd May, 1986
 - lix. Kamau, J.W., Kinama,J.M., Nguluu,S.N., Muhammed, L., Wyte,J.B.A., Rangwa, E.N. and Simiyu, P.M. (1998). Farmer's evaluation of cassava varieties in the semi-arid areas. In: eds. Akoroda, M.O, and Ngeve, J.M. Root crops in the 21st Century. Proceedings of the 7th Triennial Symposium of the International Society for tropical root crops – Africa Branch, held at Coutonou Benin, 1998. Pp378-383.
 - lx. C.J.Stigter, **J.M.Kinama**, S.B.B. Oteng'i and R.M.R. Kainkwa, **2006**. Problems with establishing agrometeorological services: austral climates can't escape. Invited keynote opening lecture as a guest speaker at the annual South African Society for Atmospheric Sciences (SASAS) conference, Bloemfontein, South Africa, October. South Africa, 23 September till 7 October 2006". Bruchem, The Netherlands
 - lxi. Kees Stigter, Tunji Oluwasemire, Lambert Onyewotu, Silvery Oteng'i, **Josiah Kinama**, Zheng Dawei, Zhao Caixia, Zhang Yingcui, V.R.K. Murthy, A.G.M. Rashidi, Ahmed T. Abdalla, Nawal K.N. Al-amin, Nageeb I. Bakheit, **2005**. Weather Services making a difference for poor farmers. II. How it can be done. Paper submitted as background paper for the first Asian Pacific Network (APN) meeting of the project "Climate and crop disease risk management: an international initiative in the Asia-Pacific region" in Hyderabad, India

Published Book chapters

- i) On Agricultural Meteorology 2010. Design of protection of sloping land from soil loss and water run off using hedgerow intercropping (Kenya) 118-122. Josiah M. Kinama, C.J. Stigter, C.K. Ong (eds)s
- ii) The TTMI ProjectI and The Picknic model. An internal evaluation of approaches and results and of prospects for TTMI Units. Effects of microclimate, soil and water conservation of contour hedgerows on sloping lands for sustainable land use in Machakos district , Kenya CJ Stigter, F.J. Wangati, J.K. Nganga and D.N. Mungai (eds) chapter 17:136-146 (1994)
- iii) Alley cropping hedgerows in semi-arid areas on flat and sloping land. Soil and water conservation, competition, yields and economic factors. Stigter. C,J, Mungai J, Ong C.K, Kinama J.M and Otengi S. 2004. Case study of economically beneficial agro-meteorological applications and services and of other success stories in agro-meteorology for policy matters, CAgM Rep. 93, WMO/TD No. 1202 edited by W. Baier, 01/2004: chapter Annex 9: pages 44-47; WMO, Geneva.

Dissertations/theses authored

- i) MSc. Land degradation in the semi- arid areas of Kenya. The case of Katumani/Kimutwa area near Machakos Town, Kenya 1991
- ii) PhD. The effects of contour hedgerows (alley cropping) on microclimate, soil and water conservation and competition on sloping lands for sustainable land use in Machakos district, Kenya 1997

CONFERENCES/CONGRESS/SYMPOSIA/SEMINARS AND PROFESSIONAL MEETINGS ATTENDED

- i) Attended Africa 5th science week and Ruforum Biennial Conference at century city conference centre in Cape Town South Africa from 17th-21st October, 2016. Exhibited CAVS academic programs and innovations and University of Nairobi academic programs in banners, posters and brochures
- ii) Attended a Workshop on fertilizer and soil amendments standards sensitization at the BOMA hotel Nairobi June 28/6/2018
- iii) Training workshop on mapping Crop Land and change detection in Kenya. Regional Centre for mapping of resources for Development held from 19th to 21st April, 2017.
- iv) Attended Kenya Organic Food Festival and exhibition (KOFFE) at Wangari Maathai Institute and exhibited CAVS academic programs in posters banners and value added product – cheese, yorghort, traditional dryland seed varieties, biofix – September 2018

- v) Attended the 4th innovations week and showcased CAVS innovations including mille cola drink, melia tissue culture, hyacinth as animal feed and as manure on 7th, 8th, and 9th March, 2018- University of Nairobi graduation square
- vi) Attended the University of Nairobi Open day from 1st-3rd February, 2018. Show cased CAVS academic programs including career path posters, academic programs via banners, brochures, exhibits including soil monolith, legume dryland seeds as well as microscopes.
- vii) Attended the 3rd Nairobi innovations week and show cased CAVs innovations (leather technologies, Hyacinth as feed, uni- seed , post harvest preservation techniques, University of Nairobi great court from 6th-10th March, 2017
- viii) Attended and showcased CAVs academic programs and innovation at CUE Catholic university of East Africa (CUEA) hosted by CUE from 16th-20th March, 2017
- ix) Attended Africa 5th science week and Ruforum Biennial Conference at century city conference centre in Cape Town South Africa from 17th-21st October, 2016. Exhibited CAVS academic programs and innovations and University of Nairobi academic programs in form of brochures, posters and banners
- x) Attended a conference side event on TICAD on Enhancing Resilience against climate and ecosystem changes in sub-Saharan Africa through utilizing indigenous and local knowledge – university of Nairobi 25/8/2016
- xi) Attended and exhibited CAVS innovations and technologies, academic programs via banners, posters and brochures at the UON 2nd innovations week held at the graduation square August 1-6th 2016.
- xii) Attended and exhibited CAVS academic programs via banners, posters and brochures hosted by CUE at Flamingo Hotel, Mombasa, April 2016.
- xiii) Attended and exhibited academic programs and innovations via brochures, posters and banners at Kisii, Eldoret and Meru regional exhibitions in May, 2016.
- xiv) Attended and exhibited academic programs via banners, posters , brochures and developed technologies at graduation square during UON open day May 2016

- xv) Attended and exhibited academic programs via brochures at Sarit International Education and EXPO fair, Nairobi – March 2016
- xvi) Attended and exhibited CAVs academic programs, technologies including released bean varieties, yorghut from camel milk, brochures, banners and posters during expo conference at Kabete campus, University of Nairobi from 4-6th Nov 2015
- xvii) Attended and exhibited CAVS innovations via banners posters and materials during the 1st Nairobi innovations week held at the graduation Square University of Nairobi from 3-7th August 2015
- xviii) Attended a round table conference on trade barriers among EAC countries by world bank 17/5/2015, Nairobi.
- xix) Attended Kenya Forum for Agricultural advisory services Workshop at Green Hills hotel 21-22th May 2015. Exhibited released bean varieties CAVS academic program and seeds produce marketed by SEMis and role of CAVS in agricultural extension and capacity building
- xx) Attended Conference on 4th Science week at chancellors Square University of Nairobi 12-17th May 2015. Exhibited CAVS innovations including bean varieties for canning ponds consumption, released bean varieties and sold by SEMis as well as academic programs banners, posters and brochures FOA, FVM and WMI.
- xxi) Attended a workshop on climate variability and change on Crop productivity as well as up-scaling of Crop Insurance for smallholder farmers in Kenya at PanAfric Hotel Nairobi on 17/12/2014.
- xxii) Attended FARA15 celebrations and Exhibited UON/CAVS academic and innovations via posters, banners and brochures at Birchwood Hotel Johannesburg, South Africa from 22-28/11/2014.
- xxiii) Attended and participated a stakeholder workshop on establishment of SEMIs as a Faculty fledged University of Nairobi Institute on 26/9/2014 at CHAK Guest House and Conference Centre, Nairobi.
- xxiv) Attended Ruforum 4th Biennial conference exhibited CAVS and university of Nairobi academic programs, SEMIS project posters, CAVS posters, banners and brochures at VIP Hotel Maputo Mozambique 19th-25th July 2014.
- xxv) Attended 26th Commission of University education Exhibition held in Eldoret and exhibited CAVS academic programs via posters showing academic and Research Strengths as a marketing tools for forth coming university students 27-29/3/2014.
- xxvi) Attended the 16th Nairobi International Education Fair March 13th, 2014 SARIT Expo Centre, Nairobi and exhibited University of Nairobi six colleges academic programs 13-16/3/2014, Nairobi.
- xxvii) Attended five day development of National seeds standard workshop on standards for Maize, sunflower, sorghum, soybeans and groundnuts held at Greenhills hotel Nyeri county from 10-14/3/2014.
- xxviii) Attended and exhibited at soil testing launch and fertilizer flagoff at Egerton University. Showcased the released bean varieties and use of biofix to enhance legume production, semis and academic programs to Stakeholders students from high school, Egerton university

students, the farming community at large President Kenyatta and his deputy Ruto in attendance 17-18/2 /2014 Nakuru, Kenya.

- xxix) Attended Kenya Bureau of Standards Rice Stakeholders Consultative meeting on request for another grade of RICE at BOMA RED COURT Hotel 26/11/2013, Nairobi.
- xxx) Attended ANAFE conference on Agribusiness making tertiary Education Relevant. Exhibited CAVS academic programs via presentation, posters, brochures and in particular the addressing of value chain addition in AGribusiness. 9-12th October 2013 at the World Agroforestry Centre (ICRAF) – Nairobi.
- xxxii) Attended and exhibited CAVS and University of Nairobi Academic programs, innovations and developed technologies at the RUFORUM 9th Annual general meeting 18-21st September 2013 with over 30 African universities annual meeting at SERENA Hotel hosted by Rwanda National Universit.
- xxxiii) Attended Kenya Bureau of Standards – East African Technical Committee workshop on developing seed and propagation materials for east African region meeting at Serena Hotel Rwanda between 9th-11th September, 2013.
- xxxiiii) Attended and exhibited CAVS academic programs, research achievements and innovations at Commission for University Education at KICC, Nairobi. Theme Celebrating expansion of University education through diversity and integration June 2013.
- xxxv) Attended a field day at KARI Muguga 14th February 2013 to show case College of Agriculture and Veterinary Sciences proven technologies for uptake by the farming communities of Kiambu county including Tissue culture citrus, bean varieties, improved chicken, traditional fertilized eggs, rabbits as well as traditional vegetables.
- xxxvi) Attended an international seminar as a panelist on water harvesting organized by the global knowledge initiative on sustainable water harvesting in Kenyatta University 16/1/2013 held at Kenyatta university conference centre.
- xxxvii) Attended Africa Agriculture Science Week and Forum for Agricultural Research in Africa (FARA) in Accra Ghana from 14-20th July, 2013. Exhibited College of Agriculture and Veterinary Sciences and University of Nairobi academic programs and Innovations as well as Semis seed management program.
- xxxviii) Attended International exhibition on higher education at SARIT Centre- Nairobi and showcased University CAVS programs and innovations May 2nd-4th 2013
- xxxix) Attended Conference on Agricultural Sector Development Strategy (ASDS) Forum for the Agricultural sector Ministries at Safari Park Hotel from 14th-17th Oct, 2012. As an exhibitor displayed the agricultural innovations developed at Kabete Campus, University of Nairobi
- xxxix) Attended KARI Biennial Scientific Conference held in Nairobi 20-26th October, 2012. Exhibited CAVS scientific innovations and technologies as well as CAVS academic programs
- xl) Attended National Science Council and Technology Conference at the 1st National Science, Technology and Innovation week. Exhibited Agricultural innovations, breakthroughs and academic programs KICC 7th-11th May, 2012
- xli) Attended a workshop on Climate change adaptation for smallholder Agriculture in Kenya. End of Project workshop IFPRI-ILRI and UOG, KARI held at KARI Head Quarters 24-25th 2011 Nairobi.
- xlii) Attended the first All Africa Horticulture Conference (AAHC) and exhibited CAVS innovations and academic programs held at Safari Park Hotel, Kenya, from 31st August to 3rd September 2009

- xliii) Attended a Workshop on Climate change as it affects agricultural resources, water resources, livestock and wild life resources held at International Livestock Research Institute (ILRI) from 2nd-3rd April 2009, Nairobi, Kenya
- xliv) Attended a Cassava stakeholders workshop on Development of East African Agricultural Productivity Program Document held on 12-2-2009 at Kilimo House, Nairobi, Kenya. 2009
- xlv) Attended a workshop on Competitive Agricultural Research Grant Fund Proposal Writing organised by Kenya Agricultural Productivity Project (KAPP), KARI at Kenya Institute of Administration (KIA) 2006
- xlvi) Attended a workshop on the Eleventh East and Central Africa Regional Forum for Training (ECA-RAFT) in Nazareth, Ethiopia 29-30th 2006 on preparation of a document for Regional Agro-forestry Training in middle colleges and Institutions of Higher learning
- xlvii) Attended an International Symposium on building Agricultural and Natural Resources Education in Africa: Quality and Relevance of Tertiary Education. Held from 14th-16th April, 2003, Kenyatta University, Nairobi

Review of journal articles and publications

- i) Journal of Meteorology and related sciences, Kenya Meteorological Society

Research projects

- i) Kenya Agricultural Productivity Project on Cassava value chain in Kenya and beyond in collaboration with KALRO, Kenya Bureau of Standards, KIRDI, Maize cereals and produce board and MOA, 2009
- ii) National Research Fund (Seth Onyango - PhD student project 2017)
- iii) NACOSTI Research fund (Sarah Muthenya - PhD student 2012)

Consultancies

- i) Analysis of The trends of yields, fertilizer use, hectarage, costs of fertilizers in rice production in East Africa. Consultancy done for Regional Centre for Remote sensing and resource mapping, Kenya 2014.

Membership in university committees

- i) College of Agriculture and Veterinary Sciences current Representative to University Exhibitions committee (2012-todate)

- ii) Former Chairman Faculty of agriculture 3rd year field and industrial attachment committee (2012-2016)
- iii) Chairman Faculty of Agriculture shows and exhibitions committee (2010-2017)
- iv) Former Member of Faculty Board of Post graduate examiners (2012-2013)
- v) Former Member of the National and Regional Agro-forestry Teams (KEN-RAFT) steering committee for public universities (2012-2014)
- vi) Former Member of the faculty Time tabling committee (2009-2012)
- vii) Member of the faculty board of examiners
- viii) Member of the Technical committee for developing standards of planting materials at The Kenya Bureau of standards (2009 to date)
- ix) A member of East African Technical Committee for developing standards on Seed and Propagation materials (2013 to date)
- x) A member of East African Technical Committee for developing standards on fertilizers and soil amendments (2013 to date)
- xi) Member of the departmental curricula development committee
- xii) A member of the post graduate board of examiners
- xiii) Chairman mentorship committee at department of Plant Science and Crop Protection (2017)
- xiv) CAVS Champion on National values (2017)

Membership in professional societies

- i) International Society for Agro-meteorology (ISNAM)
- ii*) African Crop Science Society (ACSS)
- iii) Animal Production society of Kenya (APSK)
- iv) International Society of Tropical Foresters (ISTF) and
- v) Soil Science Society of East Africa (SSSEA)

Awards

- i) I was awarded the first Honorary Mention by International Society for Agricultural Meteorology (ISNAM) jury in the 2007 ISNAM contest on best examples for agro-meteorological services in 2008.

Training of trainers

- i) Was a facilitator for Kenya Pastoralists Week on effects of climate change and variability on pastoralists' livelihood in the Greater horn of Africa. Held at Kenyatta international conference centre (KICC) from 10-12th Dec. 2009.
- ii) Was a facilitator for the training of agricultural officers in Embu Agricultural Staff training centre on climate change and its effects on integrated Pest management (IPM) 20th-21st January 2012
- iii) Was a facilitator for training of agricultural officers in Embu agricultural Staff Training Centre on sustainable Agriculture practices and Climate change (9-12/4/2012)

Social responsibility

- i) Chairman St Peters nursery school management committee (2003-2005)
- ii) Secretary general Kahawa Sukari welfare committee for water delivery and environmental management (2002-2005)
- iii) Secretary Maki Men welfare and development Association – rewarding educational performance for children of Maki members, organising public lectures on role of education in churches (2010-2014)

Referees

- i. Prof. Peter Mbuvi. Department of Land Resources Management and Agricultural Technology, University of Nairobi
- ii. Prof. Elijah Biamah. Department of Biosystems Engineering, University of Nairobi